

REMARKS

Claims 1-36 were pending in this application. Claims 6, 10, and 14-36 have been cancelled.

Claims 1-5, 7-9, and 11-13 have been amended. New claims 37-59 have been added. Accordingly, claims 1-5, 7-9, 11-13, and 37-59 remain pending in this application.

Of the elected Group I claims, claims 6, 10, 14, and 15 have been cancelled without prejudice. Applicants reserve the right to pursue the cancelled subject matter in one or more continuation or divisional applications.

Claim 1 has been amended to recite a stent. Claim 1 has also been amended to recite a calcium phosphate coating having a thickness of no more than 1 μm . Support for this amendment can be found in the specification at page 13, lines 4-12. According to the specification, it was unexpectedly discovered that if the coating is thinner than 1 μm (0.001 mm), the coating is highly flexible and capable of damage-free manipulation of a deformable implantable device, e.g., a stent (p. 10, lines 26-33, p. 15, lines 31-34, and p. 22, lines 14-16). All pending dependent claims have been amended to recite a stent.

Claim 3 has been amended to recite a coating thickness ranging from 0.01 μm (formerly 0.00001 mm, as filed) to 1 μm , in accordance with the amendment to claim 1, which recites a thickness of no more than 1 μm .

Claim 4 has been amended to recite a range from the smallest to the largest thickness sizes, and to recite the thickness in units of microns (μm).

Claim 7 has been amended to clarify that the coating covers about 20% to about 99% of the surface of the substrate.

Claim 8 has been amended to recite additional alloys such as cobalt-iron and cobalt-chromium-nickel-molybdenum-iron. Support for this amendment can be found in the specification at p. 16, line 8 and p. 23, lines 10-11.

Claim 9 has been amended to correct an obvious typographical error.

New claim 37 has been added to recite a tensile bond strength between the substrate and the calcium phosphate coating of greater than about 40 MPa. Support for this amendment can be found in the specification at p. 13, line 10.

New claims 38-43 have been added to recite product-by-process claims for the specific coating deposition processes. Support for these new claims can be found in the specification at p. 8, lines 28-33 and p. 16, lines 4-6.

New claim 44 has been added to recite a device comprising a calcium phosphate coating wherein the coating has a thickness ranging from 1 to 10 μm , and wherein the coating is discontinuous in the form of islands or patches having a diameter ranging from 1 μm to 100 μm . Support for new claim 44 can be found in the specification at p.13, lines 14-22. This passage indicates that stents with discontinuous coatings can be crimped and expanded without damaging the patches, and this embodiment is reflected in new claim 45. These patches can be deposited on the substrate through a variety of methods, as recited in the product-by-process claims 54-58. Additionally, a thin continuous coating less than 1 μm can be combined with the discontinuous thicker coating (p. 13, lines 29-30), and this embodiment is reflected in new claim 59. New claims 46-53 recite similar limitations to claims 2, 13, 5, 37, 9, 11, 12, and 8.

Accordingly, no new matter has been added.

Respectfully submitted,

By: 

Hilton W.C. Sue
Registration No. 51,325
tel: 604.669.3432 ext. 8939
fax: 604.681.4081
e-mail: hsue@patentable.com

Vancouver, B.C.
CANADA

Encl.